IN THE CLAIMS

Amend the claims as follows: Claim 101, delete

(ACCULL)

Claim 104, delete "1014" and insert -- 101 --.

Claim 122, after "claim" insert --121.

Kindly add the following claims

- 125. A process for the preparation of a synthetic pure oligosaccharide corresponding to a heparinic mucopolysaccharide having from 2 to 12 saccharide units which comprises the sequence of steps of
- 1) reacting two saccharides to form a link between said saccharides which reaction is selected from the group consisting of

A) condensing a D-glucosamine (I) with a uronic acid (II)

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COOM

OR

OR

OR

II

to form a $1\stackrel{2}{\rightarrow}4$ linkage/between I and II, and

B) condensing a uronic acid (III) with a D-glucosamine (IV)

COOM

R'O

OR 1 OD

OR 1

OR 1

HO OR 1
OR 1
OR 1
OR 1
OR 1

IV

III

to form a 1 4 linkage between /III and IV, wherein

X is halogen,

OD is O-imidoyl or together with the adjacent OR, is an orthoester,

N is N₃, N-acetyl or N-benzyl,

M is an alkyl or acyl,

 R_1 is an -OH protecting group selected from the group consisting of acyl, alkyl, substituted alkyl, aryl, cetal or acetal between two R_1 groups adjacent to each other; 1,6-anhydro bridge between R_1 and R_1 ; and in formula IV, two OR_1 groups form an epoxy group; provided that at least one R_1 group is different from the other R_1 groups;

R' and R, identical or different, are selected from the group consisting of R₁, a glucosamine, uronic acid; an oligosaccharide having glucosamine and uronic acid units wherein R' and R of the glucososamine, uronic acid or oligosaccharide are OT; T being selected from the group consisting of allyl, propenyl, acyl, halogenated acyl and p-methoxybenzoyl, with the proviso that R + R' are \$\leq\$ 10 saccharide units; and T; and wherein additionally OR is selected from the group consisting of X and -OD,

- 2) hydrolyzing the acyl groups and obtaining free -OH groups,
- 3) reacting the $-\phi H$ groups with a sulfonating agent or acylation agent to obtain $-OSO_2$ or acyl groups, and
- 4) removing the remaining R_1 groups by catalytic hydrogenation to obtain free -OH groups.
- T, a monosaccharide or an oligosaccharide, further comprises after the condensation, removing T to form -OH and repeating said removal and condensation steps until the desired number of saccharides are linked.
- 127. The process of claim 125 wherein R_1 is acetyl in the positions which are to be substituted by $-SO_3$ or acyl and benzyl in the positions which are to be OH.

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- The process of claim 125 wherein T is selected 128. from the group consisting of ally1, chloroacetyl and p-methoxybenzoyl.
- The process of claim 127 wherein the acetyl 129. groups are hydrolyzed by saponification with a strong base followed reaction with a sulfation or acylation agent.
- The process of |125| wherein N_3 is converted to 130. NH 2 during the catalytic hydrogenation step.
- The process of claim 130 which further comprises reacting the NH₂ group with an agent selected from a sulfation agent and an acylation agent and obtaining -NH-SO3and NH-acyl, respectively.
- The process of claims 125 which further 132. comprises saponifying $CO\phi M$ with a strong base and obtaining COO .
- The process of claim 134 which further comprises salifying the COO group with an alkaline metal.
- The process of claim 125 which further comprises 134. using a structural analog in place of at least one D-glucosamine or uronic actid wherein the structural analog is selected

from the group consisting of a neutral sugar, a desoxy-sugar, uronic acid units and D-glucosamine units of different configurations.

- 135. The process of claim 125 wherein a condensation reaction between a halide and an OH is carried out in a solvent medium in the presence of a catalyst.
- 136. The process of claim 135 wherein the organic solvent is selected from the group consisting of dichloromethane or dichloroethane and the catalyst is selected from the group consisting of a silver or mercury salt.
- 137. The process of claim 136 wherein the catalyst is silver trifluoromethane sulfonate, silver carbonate, silver oxide, mercuric bromide or mercuric cyanide.
- 138. The process of claim 134 wherein the structural analog of L-iduronic acid (III) is L-idose.
- 139. The process of claim 125 wherein when OD is 1, 2-0-methoxyethylidene, the condensation is carried out in a solvent which boils above 100° C in the presence of a catalyst.

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